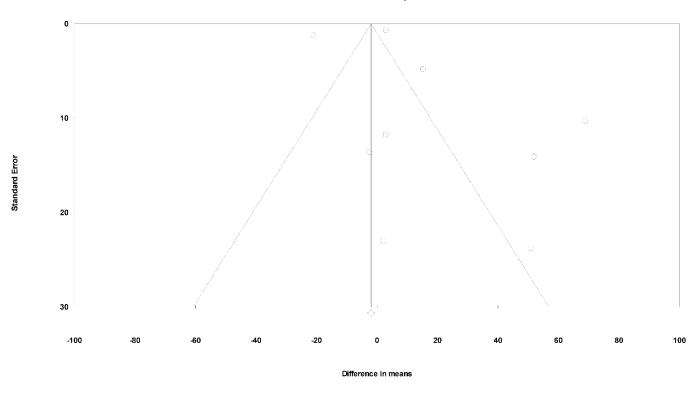
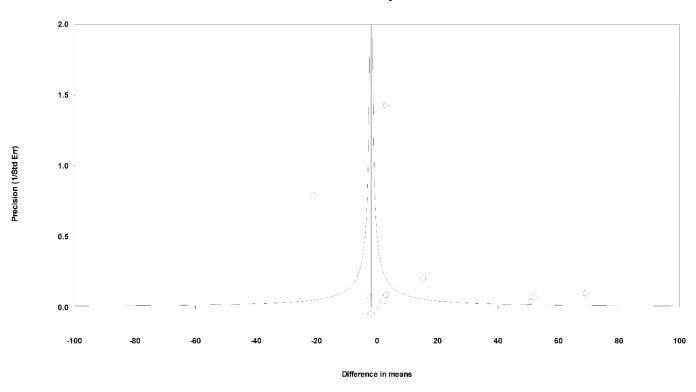
## **Supplementary Figure 1:**

#### Funnel Plot of Standard Error by Difference in means



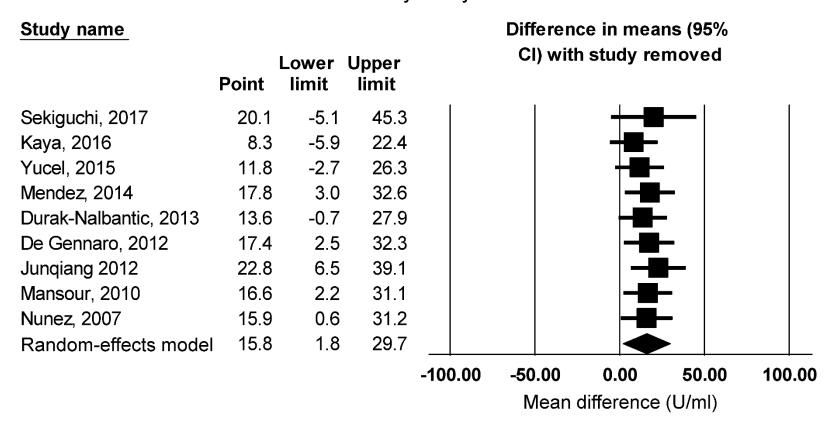
## **Supplementary Figure 2:**

#### Funnel Plot of Precision by Difference in means



#### **Supplementary Figure 3:**

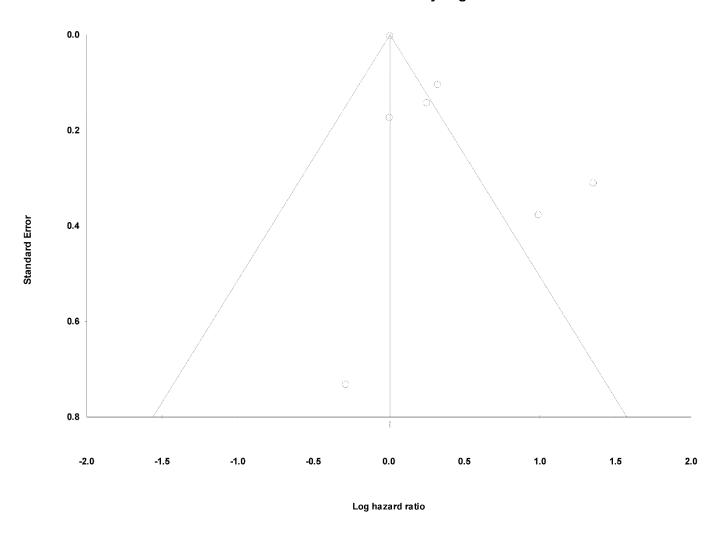
Mean difference in Ca-125 levels between patients with AF and those without AF: sensitivity analysis



Lower in AF Higher in AF

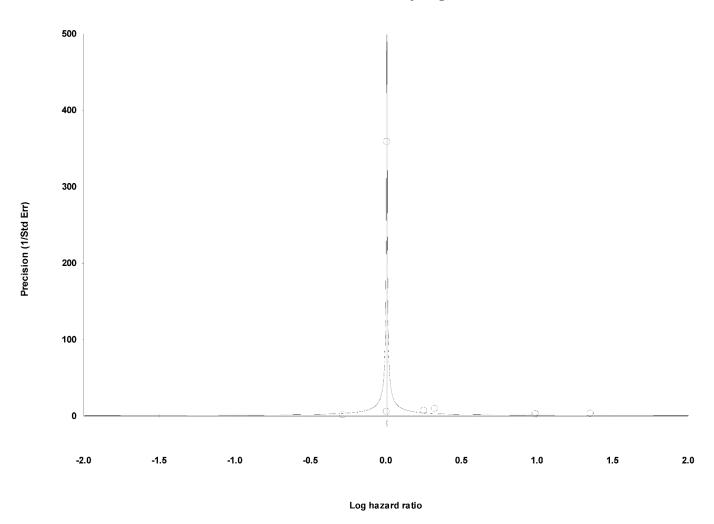
## **Supplementary Figure 4:**

## Funnel Plot of Standard Error by Log hazard ratio



## **Supplementary Figure 5:**

## Funnel Plot of Precision by Log hazard ratio



## **Supplementary Figure 6:**

High Ca-125 levels and AF: sensitivity analysis

Study name	Statis	tics with	study r	emoved	Hazard ratio (95% CI)						
	Point	Lower limit	Upper limit	p-Value	with study rem		emo	ved			
Sekiguchi, 2017	1.439	1.040	1.992	0.028			-				
Kaya, 2016	1.547	1.111	2.155	0.010			-				
Yucel, 2015	1.302	1.000	1.695	0.050				┡			
Mendez, 2014	1.509	1.094	2.081	0.012			-				
Yilmaz, 2011	1.208	0.977	1.494	0.082							
Mansour, 2010	1.423	1.078	1.878	0.013			-				
Nunez, 2007	1.428	1.014	2.012	0.042			-				
Random-effects model	1.392	1.063	1.822	0.016			4				
					0.1 0.2	0.5	1	2	5	10	
					Hazard ratio						
					Lower risk Higher ris					risk	

## **Supplementary Figure 7:**

High Ca-125 levels (≤ 35 U/ml) and AF

Study name	Stat	tistics fo	r each st	udy		<u> </u>					
	Hazard ratio	Lower limit	Upper limit	p-Value							
Sekiguchi, 2017	1.287	0.972	1.703	0.078				H∎			
Mansour, 2010	0.753	0.179	3.160	0.698		+				.	
Fixed-effects mo	del 1.262	0.958	1.661	0.097				<b>4</b>			
$I^2 = 0\%$					0.1	0.2	0.5	1	2	5	10
					Hazard ratio						
						Lowe	er risk		Highe	er risk	

High Ca-125 levels (> 35 U/ml) and AF

Study name	Stat	istics fo	r each st	tudy		<u> </u>	nd 95% (	CI			
	Hazard ratio	Lower limit	Upper limit	p-Value							
Kaya, 2016	1.007	1.002	1.013	0.012							
Yucel, 2015	2.693	1.285	5.642	0.009							
Mendez, 2014	1.005	0.715	1.413	0.977				-	-		
Yilmaz, 2011	3.870	2.105	7.115	0.000							•
Nunez, 2007	1.382	1.125	1.697	0.002					-		
Random-effects mo	<sub>del</sub> 1.487	1.061	2.084	0.021				<b>-</b>			
<i>J</i> <sup>2</sup> = 88%					0.1	0.2	0.5	1	2	5	10
					Hazard ratio						
					Lower risk Higher ri					er risk	

#### **Supplementary Figure 8:**

# Mean difference in Ca-125 levels between heart failure patients with AF and those without AF

Study name	Statisti	Sa	mple s	size	Difference in means and 95% Cl									
	Difference in means	Lower limit	Upper limit	AF	no AF	Total								
Kaya, 2016	69.0	48.8	89.2	67	138	205					_			
Yucel, 2015	52.0	24.3	79.7	36	113	149					_			
Mendez, 2014	-2.4	-29.2	24.4	84	72	156		_						
Mansour, 2010	2.1	-43.1	47.3	15	132	147								
Nunez, 2007	15.3	5.8	24.8	1165	1477	2642			-	•				
Random-effects	model 28.7	1.3	56.1	1367	1932	3299								
<i>I</i> <sup>2</sup> = 87%							-100.00	-50.00	0.00	50.00	100.00			
							Mean difference (U/ml)							

Lower in AF Higher in AF

## **Supplementary Figure 9:**

High Ca-125 levels and AF in heart failure patients

Study name	Sta	tistics fo	r each st	udy		CI						
	Hazard ratio	Lower limit	Upper limit	p-Value								
Kaya, 2016	1.007	1.002	1.013	0.012								
Yucel, 2015	2.693	1.285	5.642	0.009				-				
Mendez, 2014	1.005	0.715	1.413	0.977			-	-	•			
Mansour, 2010	0.753	0.179	3.160	0.698		+						
Nunez, 2007	1.382	1.125	1.697	0.002				-				
Random-effects mod	lel 1.196	0.929	1.540	0.166					<b>&gt;</b>			
<i>I</i> <sup>2</sup> = 75%					0.1	0.2	0.5	1	2	5	10	
					Hazard ratio							
					Lower risk Higher risk							

#### **Supplementary Figure 10:**

# Mean difference in Ca-125 levels between patients with general medical conditions with AF and those without AF

Study name	Study name Statistics for each study			Sample size				Differen	ce in means ar	nd 95% CI		
	Difference in means	Lower limit	Upper limit	AF	no AF	Total						
De Gennaro, 2012	3.0	-20.1	26.1	48	58	106				-		
Junqiang 2012	-21.0	-23.5	-18.5	55	58	113						
Random-effects mod	del -11.9	-34.7	11.0	103	116	219		<b>-</b>				
<i>I</i> <sup>2</sup> = 76%							-100.00	-50.00	0.00	50.00	100.00	
							Mean difference (U/ml)					

Lower risk Higher risk